

CONTENTS

| | |
|---|-----|
| Improved gram-quantity isolation of malto-oligosaccharides by preparative HPLC A.T. Hotchkiss, Jr., R.M. Haines and K.B. Hicks (Philadelphia, PA, USA) | 1 |
| Molecular and crystal structure of the bola-amphiphile <i>N</i> -[8-(D-gluconamido)octyl]-D-gluconamide A. Müller-Fahrnow, W. Saenger, D. Fritsch, P. Schnieder and J.-H. Fuhrhop (Berlin, Germany) | 11 |
| The crystal and molecular structures of 1,2,3,4,5,6,7,8-octa- <i>O</i> -acetyl-L-threo-L-alto- and -L-threo-L-galacto-octitol P. Köll (Oldenburg, Germany), M. Morf, B. Zimmer, J. Kopf (Hamburg, Germany), A. Berger, K. Dax and A.E. Stütz (Graz, Austria) | 21 |
| A detailed ¹ H and ¹³ C NMR study of a repeating disaccharide of hyaluronan: the effects of temperature and counterion type W. Sicińska, B. Adams and L. Lerner (Madison, WI, USA) | 29 |
| An AM1 molecular orbital study of α-D-glucopyranose and β-maltose: Evaluation and implications M.E. Brewster, M.-j. Huang, E. Pop (Gainesville, FL, USA), J. Pitha (Baltimore, MD, USA), M.J.S. Dewar (Gainesville, FL, USA), J.J. Kaminski (Bloomfield, NJ, USA) and N. Bodor (Gainesville, FL, USA) | 53 |
| Large-scale synthesis of β-L-fucopyranosyl phosphate and the preparation of GDP-β-L-fucose K. Adelhorst and G.M. Whitesides (Cambridge, MA, USA) | 69 |
| α-Fucosylation by 2,3,4-tri- <i>O</i> -benzoyl-α-L-fucopyranosyl bromide under Helferich conditions N.E. Nifant'ev, V.Y. Amochaeva, A.S. Shashkov and N.K. Kochetkov (Moscow, Russian Federation) | 77 |
| The stepwise synthesis of oligo(glycosyl phosphates) via glycosyl hydrogenphosphonates. The chemical synthesis of oligomeric fragments from <i>Hansenula capsulata</i> Y-1842 exophosphomannan and from <i>Escherichia coli</i> K51 capsular antigen A.V. Nikolaev, I.A. Ivanova and V.N. Shibaev (Moscow, Russian Federation) | 91 |
| Enantiospecific synthesis of 1-deoxythiomannojirimycin from a derivative of D-glucose I.I. Cubero, M.T.P. López-Espinosa (Granada, Spain), A.C. Richardson (London, UK) and M.D.S. Ortega (Granada, Spain) | 109 |
| An electrophile-mediated cyclization on the 1,6-anhydro-D-glucopyranose framework C. Leteux, A. Veyrières and F. Robert (Paris, France) | 119 |
| Hydrothermal formation of 1,2,4-benzenetriol from 5-hydroxymethyl-2-furaldehyde and D-fructose G.C.A. Luijckx, F. Van Rantwijk and H. Van Bakkum (Delft, Netherlands) | 131 |

| | |
|---|-----|
| All- α -D-linked tetra- and penta-saccharide substructures of Trestatin A by block syntheses with triflic anhydride as promoter H.P. Wessel, B. Mayer and G. Englert (Basel, Switzerland) | 141 |
| Microbial synthesis of 3-deoxy-D-erythro-hex-2-ulosonic acid 6-phosphate B.R. Knappmann (Jülich, FRG), M.A. El-Nawawy, H.G. Schlegel (Göttingen, FRG) and M.-R. Kula (Jülich, FRG) | 153 |
| Chemical synthesis of a comb-shaped, branched stereoregular polysaccharide, 4-O- α -D-mannopyranosyl-(1 \rightarrow 6)- α -D-mannopyranan K. Kobayashi, K. Nomura and M. Okada (Nagoya, Japan) | 161 |
| N-Acetyl group distribution in partially deacetylated chitins prepared under homogeneous conditions H. Sashiwa, H. Saimoto, Y. Shigemasa (Tottori, Japan) and S. Tokura (Sapporo, Japan) | 167 |
| Identification of 2-amino-2,6-dideoxy-D-glucose (D-quinovosamine), isolated from the cell walls of the alkaliphilic <i>Bacillus</i> sp. Y-25, by 500-MHz ^1H NMR spectroscopy M. Ito, R. Aono and K. Horikoshi (Yokohama, Japan) | 173 |
| Structural studies of <i>Vibrio fluvialis</i> M-940 O-antigen polysaccharide L. Kenne (Uppsala, Sweden), B. Lindberg (Stockholm, Sweden), M.M. Rahman and M. Mosihuzzaman (Dhaka, Bangladesh) | 181 |
| Formation of α -(1 \rightarrow 6), α -(1 \rightarrow 3), and α -(1 \rightarrow 2) glycosidic linkages by dextransucrase from <i>Streptococcus sanguis</i> in acceptor-dependent reactions M.K. Bhattacharjee and R.M. Mayer (Columbus, OH, USA) | 191 |
| Characterisation of hot-water-soluble components of starches G. Murugesan, K. Shibamura and S. Hizukuri (Kagoshima, Japan) | 203 |
| The systems of carrageenans from cystocarpic and tetrasporic stages from <i>Iridaea undulosa</i> : fractionation with potassium chloride and methylation analysis of the fractions C.A. Stortz and A.S. Cerezo (Buenos Aires, Argentina) | 217 |
| Purification and characterisation of a β -D-xylosidase from the anaerobic rumen fungus <i>Neocallimastix frontalis</i> V. Garcia-Campayo and T.M. Wood (Aberdeen, UK) | 229 |
| Purification, characterisation, and carbohydrate specificity of the lectin of <i>Ficus cunia</i> S. Ray, H. Ahmed, S. Basu and B.P. Chatterjee (Calcutta, India) | 247 |
| <i>Notes</i> | |
| Crystal and molecular structure of 1-phenyl-(1,2-dideoxy- α -D-glucofuranol[2,1- <i>d</i>]imidazolidine-2-selone M.J. Diáñez, M.D. Estrada and A. López-Castro (Sevilla, Spain) | 265 |
| Structure of the acidic exopolysaccharide of <i>Pseudomonas marginalis</i> Strain ATCC 10844 S.F. Osman and W.F. Fett (Philadelphia, PA, USA) | 271 |
| Use of 2-pyridyl 2-acetamido-3,4,6-tri-O-acetyl-2-deoxy-1-thio- β -D-glucopyranoside as a glycosyl donor and methyl iodide as an activator for the synthesis of 1,2- <i>trans</i> -linked saccharides H.B. Mereyala and V.R. Gurijala (Hyderabad, India) | 277 |

| | |
|---|-----|
| Enantiospecific synthesis of (<i>R</i>)-1,6-dioxaspiro[4.5]decane from a derivative of D-fructose I. Izquierdo Cubero, M.T. Plaza López-Espinosa (Granada, Spain), A.C. Richardson and K.H. Aamlid (London, United Kingdom) | 281 |
| The reaction of methyl 5-thio-3- <i>O</i> -toluene- <i>p</i> -sulfonyl- α -D-glucopyranoside and its triacetate with sodium azide N.A. Al-Masoudi (Basrah, Iraq) and W. Pfeleiderer (Konstanz, Germany) | 287 |
| Synthesis of methyl 2,3-anhydro- α - and - β -L-erythrofuranoside J. Jarý and I. Raich (Prague, Czechoslovakia) | 291 |
| Reaction of some 1,2- <i>trans</i> -aldose peracetates with thionyl chloride–acetic acid — a convenient synthesis of some 1,2- <i>trans</i> -per- <i>O</i> -acetyl-D-glycosyl chlorides G.J.F. Chittenden (Nijmegen, Netherlands) | 297 |
| Synthesis of 3- <i>O</i> -(alkyl-branched acyl)-2-deoxy-2[(3 <i>R</i>)-3-hydroxytetradecanamido]-4- <i>O</i> -phos- phono-D-glucose derivatives related to bacterial lipid A Y. Ogawa, M. Wakida, H. Ishida, M. Kiso and A. Hasegawa (Gifu, Japan) | 303 |
| A new practical synthesis of (2 <i>S</i> , 3 <i>R</i> , 4 <i>R</i> , 5 <i>S</i>)-3,4-dihydroxy-2,5-bis(hydroxymethyl)pyrrolidine W. Zou and W.A. Szarek (Kingston, ON, Canada) | 311 |
| Reexamination of composition and physico-chemical characteristics of water-soluble pectic substances from guava (<i>Psidium guajava</i> L.) O. Marcelin, L. Saulnier, P. Williams and J.-M. Brillouet (Montpellier, France) | 315 |
| <i>Preliminary communications</i> | |
| Stereocontrolled synthesis of GD ₂ Y. Matsuzaki, S. Nunomura, Y. Ito, M. Sugimoto, Y. Nakahara (Saitama, Japan) and T. Ogawa (Japan, Tokyo) | C1 |
| Stereospecific synthesis of 1,2- <i>cis</i> -glycosides of 2-amino sugars N.K. Kochetkov, E.M. Klimov, N.N. Malysheva and A.V. Demchenko (Moscow, Russian Federation) | C7 |
| Structural study of a new sialic acid-containing O-specific polysaccharide of <i>Salmonella arizonae</i> O21; formation of anhydro derivatives of neuraminic acid upon treatment with anhydrous hydrogen fluoride E.V. Vinogradov, N.A. Paramonov, Y.A. Knirel, A.S. Shashkov and N.K. Kochetkov (Moscow, Russian Federation) | C11 |
| <i>Announcements</i> | C15 |
| <i>Author index</i> | C17 |
| <i>Subject index</i> | C19 |
| <i>Contents</i> | C23 |

